



Pond Condition Progress Report and Work Plan 2014

Cape Cod National Seashore



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Year 15

Introduction

The freshwater kettle ponds of the Cape Cod National Seashore are a unique habitat formed up to 13,000 years ago by the retreating glaciers. They support a wide variety of species including fish, frogs, and turtles. Unfortunately, these ecosystems are also fragile, and have been degraded due to the high level of visitor use at their beaches. The kettle pond beaches are typically packed on hot summer days, and visitors unknowingly cause erosion by trampling vegetation, creating new social paths, and continuously walking on steep banks.

Management of the seashore's kettle ponds is highly complex due to the interactions between privately owned land, the town, and the NPS, as well as between various departments within the seashore. A complete assessment of the condition of these ponds was undertaken by AmeriCorps member Patrick Roehrdanz in August 2002, which paved the way for the action which taken in the past three years to restore the kettle pond shorelines. AmeriCorps has taken a major role in helping with pond management through the monitoring work of the seashore's Planning Assistant placement, as well as through group workdays.

During the 2013-2014 AmeriCorps year, a pond condition assessment was completed and showed that the ponds needed critical and direct erosion and overuse corrections to maintain their health and guide visitors to better use patterns. This work was managed by a Ponds Workgroup that included a core group of seashore staff partnered with the AmeriCorps member placed in the National Seashore Planning office. The workgroup focused on the Truro ponds this year because they were higher priorities for immediate work based on the fact that the Wellfleet Ponds received priority the previous year. Two AmeriCorps workdays were carried out in April and May to help restore ponds in Wellfleet and Truro, including Duck Pond, Dyer Pond, Great Pond Truro, Ryder Pond, Snow Pond, Spectacle Pond, and Slough Pond Triangle. Restoration work involved jute netting in order to hold soil in place on steep banks, and planting to help anchor the soil and return native vegetation for wildlife. Fencing and signs were also installed in order to keep people out of restoration areas, as well as to explain regulations designed to help protect the pond resources. Additional work included the installation of a water bar and railings.

The condition progress report provides a summary of the work completed at the Wellfleet and Truro ponds, and the work plan identifies a list of the priorities to focus on for the coming year, as well as routine check-up items throughout the ponds area. This document is essentially an update of the *2012-2013 Ponds Condition Progress Report and Work Plan* created by AmeriCorps member Lindsey Crouch. It is broken up into groups of ponds based on those that are in close proximity to each other to make site visits simpler. For each pond there is a list of the work completed and the follow-up or additional work that is needed.

Ponds

Below is a list of all of the ponds in Wellfleet and Truro that were worked on or that are priorities for further work. Also listed are the other ponds in the area that are not included in this pond work because they have limited public access and therefore do not have the same erosion problems as the rest.

Wellfleet:

- Dyer
- Duck
- Spectacle
- Higgins
- Herring
- The Sluiceway (town landing at Gull-Higgins Ponds with NPS-owned land adjacent)
- Long Pond "pocket" or walk-in park (also has town-owned landing)
- Great (town landing)
- Gull (town landing)

Truro:

- Snow
- Great
- Ryder
- Slough
- Horseleech

Limited public access:

- Kinnacum
- Northeast
- Round
- Southeast
- Turtle
- Williams

Pond groupings

Below are the same ponds (excluding ones that are town landings or that have limited access) broken into 5 groups to make the site visits as convenient as possible. Group 1 is made up of Truro ponds that are the priority for 2013-2014 because not much work had been completed there during the previous work year. The other groups are mostly ponds work which was completed in 2012-2013, and required updated work completed during the current work year.

Group 1: (main priority for 2014)

- Ryder
- Snow
- Great (Truro)

Group 2:

- Duck
- Dyer

Group 3:

- Long
- Spectacle (Wellfleet priority)

Group 4:

- Herring (Black Pond Road access)
- Slough
- Horseleech

Group 5:

- Herring (Schoolhouse Hill Road access)
- Higgins
- Sluiceway

Work Procedure

- Conduct site assessment and log needs, supplies, and whose help is needed.
- Submit park work orders and AmeriCorps group project request forms as needed.
- Order supplies and organize workdays.
- Consult with conservation commissions as needed.
- Record visitor use on monitoring sheet (see appendix A).

Group 1: Ryder, Snow, and Great Pond Truro

In 2014, extensive work was completed at these Truro ponds based upon the needs described in the previous year's report. Snow and Great Pond Truro required the greatest mitigation efforts.

Ryder Pond

Work completed:

- Pond regulations, no pets, and protect ponds signs installed by the beach.
- Small section of jute netting at beach.

Follow-up:

- New sign post at the split rail fence at the parking lot.
- Replace 2 damaged split rails at parking lot.



Jute netting was installed at this bank to prevent more severe erosion.

Snow Pond

Work completed:

- Removal of broken snow fencing along the shore and main trail.
- Replacement/extension of split rail fencing along the main trail.

- Removal of a downed tree on a trail.
- Biodegradable jute netting installed on eroded slopes (1 roll).
- Five bayberries planted.

Follow-up:

- Update with new pond regulations sign.
- Monitor condition of plants, jute netting, and fencing.



Great Pond Truro

Work completed:

- Native plantings of 8 inkberry and 7 bayberry along the eroded slope to the right of the stairwell, and at the second beach to the left of the stairwell.
- Jute netting placed on the right of the existing stairwell, following an eroded social path.
- Jute netting placed along the second beach (left of the stairwell).
- Three posts, 6 rails of fencing installed along stairs.
- Railing constructed at stairwell.

Follow-up:

- Update with new pond regulations sign on closed area.
- Monitor condition of plants, fencing, and jute netting.



Group 2: Duck, Dyer and Great Pond Wellfleet

Duck Pond

Work completed:

- Fixed 8 sections of fencing, with 4 sections on right of path, 2 on left, and 2 sections by parking lot at fire gate.
- Protect ponds and regulations signs put on post by pond.
- Pond regulations sign and post installed at entrance.
- Four bayberry planted at beach.

Follow-up:

- Vandalism was a problem at Duck Pond in 2013 with the rope fence being removed, and again in 2014 with split rail fencing removed from the town parking lot and burned. DPW later replaced this split rail fencing. Fencing, signs, and plants should be regularly monitored.



Vandalism at Duck pond.

Dyer Pond

Work completed:

- Fixed revegetation work at rope swing (Dyer West).

- Jute netting installed at retaining wall.
- Four sections of split rail fencing installed.
- Native plantings included bushes along main path at upper edge of slope, with 12 highbush blueberry, 15 lowbush blueberry, and 10 bayberry.

Follow-up:

- Monitor condition of fencing, jute netting, and plants.



Great Pond Wellfleet

Work completed:

- No work was completed here in 2014.

Follow-up:

- New assessment of this site may be needed.

Group 3: Long and Spectacle Ponds

Long Pond

Work completed:

- Waterbar installed

Follow-up:

- Monitor water runoff to assess if waterbar is successful.

Spectacle Pond

Work completed:

- Parking fencing reconfiguration, with nails in posts to prevent removal.
- Native plantings of 12 highbush blueberry, 8 bayberry, and 4 lowbush blueberry.
- Erosion control with installation of jute netting.
- Four sections of split rail fencing installed by beach.

Follow-up:

- Steps need to be installed at beach.
- Update with new pond regulations sign.
- Monitor condition of plants, fencing, and jute netting.



Group 4: Herring, Slough and Horseleeche Ponds

Herring Pond (Black Pond Road access)

Work completed:

- No work was completed here in 2014.

Follow-up:

- Rangers to replace stolen sign between Herring and Higgins.

Horseleeche Pond

Work completed:

- No work was completed here in 2014.

Follow-up:

- Needs protect ponds sign at parking area

Slough Pond

Work completed:

- Native plantings in restoration area with 4 bayberry and 5 highbush blueberry.
- Fixed 1 section of split rail fencing.

Follow-up:

- Monitor condition of plants and fencing.



Group 5: Herring and Higgins Ponds, and the Sluiceway

Herring (Schoolhouse Hill Road access) and Higgins Pond area

Work completed:

- No work was completed here in 2014.

Follow-up:

- New assessment of this site may be needed.

Sluiceway

Work completed:

- No work was completed here in 2014.

Follow-up:

- Install respect private property owner's rights sign.
- Install signage showing it is town's decision for July and August closure (Suzanne).
- Confer with Suzanne about moving gate.

Pond workgroup members:

Elizabeth Migliore, Barnstable County's AmeriCorps National Seashore Planning Assistant

Lauren McKean, CCNS Park Planner

Sophia Fox, CCNS Aquatic Ecologist

Tim Morrison, CCNS Supervisory Park Ranger

Eric Trudeau, CCNS Park Ranger

John DeFoe, CCNS RTG Maintenance Supervisor

With consultations from:

Steve Smith, PhD, CCNS Plant Ecologist

In cooperation with:

Hillary Greenberg-Lemos, Wellfleet Conservation Agent

Suzanne Thomas, Wellfleet Beach Administrator

And help from:

AmeriCorps Cape Cod LeHac and Wells House

Wayne Davis, RTG Maintenance

*Note: Additional work was completed in 2014 to install split rail fencing in the parking lot at Gull Pond town landing. This was a project completed with the town of Wellfleet, AmeriCorps Cape Cod, and a group of Scouts, but did not involve the seashore.

Appendix A: Pond Visitor Use Monitoring Sheet

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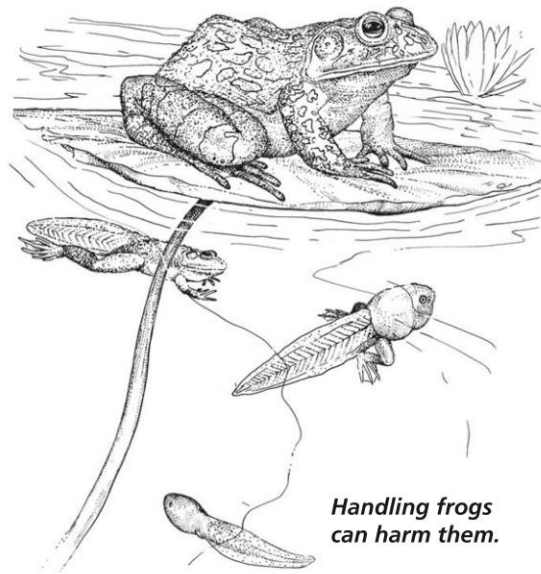
Protect Ponds

Cape Cod National Seashore

National Park Service
U.S. Department of the Interior



Kettle ponds are glacially-formed basins filled with clear, naturally-acidic fresh water. In addition to their beauty and the recreational opportunities they offer, they provide habitat essential for distinct communities of plants and animals. Their unique chemistry and ecology render these ponds particularly sensitive to human-caused impacts.



*Handling frogs
can harm them.*

Preserve their beauty and ecology.

- ❖ Use restrooms before entering the water.
- ❖ Avoid trampling or removing shoreline and aquatic plants.
- ❖ Stay on marked trails to prevent slope erosion.
- ❖ Keep pets and horses away from ponds.
- ❖ Use well-fitting swim diapers on babies.
- ❖ Enjoy pond wildlife through observation; handling animals can harm them.
- ❖ Carry out all trash including cigarette butts.
- ❖ Keep soaps and detergents out of ponds.

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